

model. These included the rates of response and remission during the induction period. Adverse events were also important; however, only those for standard care were key drivers in the submission, while adverse event rates for both treatments were important in the reconstructed model. **CONCLUSIONS:** Rates of response, remission and adverse events are important drivers of cost effectiveness in Crohn's disease.

PGI32

MODELING THE COST-EFFECTIVENESS OF THE ALL ORAL, DIRECT-ACTING ANTIVIRAL REGIMEN DACLATASVIR PLUS SOFOSBUVIR IN PATIENTS CO-INFECTED WITH HEPATITIS C VIRUS (HCV) AND HIV

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OBJECTIVES: Compared to infection with hepatitis C virus (HCV) alone, patients co-infected with HIV have faster disease progression, decreased quality of life and increased rates of mortality. The objective of this study was to compare the cost-effectiveness of novel, all oral direct-acting antiviral regimens for the treatment of HCV/HIV co-infected patients. **METHODS:** A published, validated Markov model was used to model a cohort of HCV/HIV co-infected patients (mean age 50 years, 50% female, evenly distributed across F0–F4) treated with 12 weeks daclatasvir+sofosbuvir (DCV+SOF) versus 24 weeks sofosbuvir+ribavirin (SOF+RBV). Clinical inputs were obtained from a matching-adjusted indirect comparison (MAIC) of ALLY-2 (DCV+SOF: adjusted SVR=100.0%) and PHOTON-1/-2 (SOF+RBV: adjusted SVR=84.6%). HIV co-infection- and HCV genotype-specific transition rates were applied and analyses combined and weighted per MAIC values (genotypes 1 & 4=56.5%; 2=16.5%; and 3=27.0%). UK acquisition costs (DCV=£2,043.15, SOF=£2,915.24 and RBV=£66.95 per week), disease state costs (2014) and health utility values were used. Costs and benefits were discounted at 3.5%. **RESULTS:** Reduced total costs and increased QALYs were estimated for DCV+SOF versus SOF+RBV, resulting in DCV+SOF dominating in terms of cost-effectiveness. Predicted discounted total costs were £239,213 versus £250,014, respectively. Whilst the cost of HIV management increased by £5,237 per person due to the increase in life expectancy (19.20 discounted years versus 18.64) with DCV+SOF, there was a reduction in HCV management costs of £5,695 as a consequence of avoiding end-stage liver disease (ESLD) complications. Predicted discounted QALYs were 11.56 versus 10.91, respectively. **CONCLUSIONS:** The results of this analysis demonstrate that significant value might be realised by the use of DCV+SOF over SOF+RBV in patients co-infected with HIV and HCV. Cost-savings and QALY gains for the DCV+SOF regimen are driven by the shorter treatment duration and higher SVR, resulting in lower overall acquisition costs and fewer ESLD complications.

PGI33

COST-EFFECTIVENESS AND COST-UTILITY OF HOME-BASED HYPNOTHERAPY USING COMPACT DISC VERSUS INDIVIDUAL HYPNOTHERAPY BY A THERAPIST FOR PEDIATRIC IRRITABLE BOWEL SYNDROME AND FUNCTIONAL ABDOMINAL PAIN (SYNDROME)

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OBJECTIVES: Gut-directed hypnotherapy (HT) is effective for irritable bowel syndrome (IBS) and functional abdominal pain (syndrome) (FAP(S)) in children. We assessed the cost-utility and cost-effectiveness of HT by self-exercises at home using a compact disc (CD) against individual HT performed by a qualified hypnotherapist (iHT). **METHODS:** Alongside a multicentre non-inferiority randomized controlled trial among children with IBS and FAP(S) data on treatment response, quality of life (Health Utility Index 3) and societal and health care costs were gathered at baseline (T0), end of treatment (T1) and 6 (T2) and 12 (T3) months thereafter. Incremental cost-effectiveness ratios with the extra costs per responder and per QALY were estimated and the cost-effectiveness acceptability of CD was assessed for various levels of willingness to pay (WTP) following non-parametric bootstrapping. **RESULTS:** After one year, CD treatment resulted in cost savings of €397 (95% bca CI: -€794 to -€26; P=0.038) compared to iHT. Treatment response in the CD group (62.1%) was non-inferior to the iHT group (71.1%). Offering CD treatment instead of iHT treatment saves €4,411 per treatment non-responder. After correction for differences in health utility at baseline, the mean difference in QALYs (0.014 (95% bca CI: -0.032 to 0.060) slightly favoured CD treatment. The probability that CD treatment is both, cost saving and gaining QALYs, equals 69.7%; the probability that CD is cost-effective equals 0.825 at a reasonable WTP in children of €50,000. **CONCLUSIONS:** Home-based treatment with HT exercises on CD for children with IBS or FAP(S) is non-inferior and seems cost-effective compared to individual HT with a qualified therapist and could therefore be offered as first line treatment.

PGI34

ECONOMIC EVALUATION OF FECAL MICROBIOTA TRANSPLANTATION FOR THE TREATMENT OF RECURRENT CLOSTRIDIUM DIFFICILE INFECTION IN AUSTRALIA

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OBJECTIVES: Clostridium difficile is the most common cause of hospital-acquired diarrhea in Australia. In 2013, a randomized controlled trial demonstrated the

effectiveness of fecal microbiota transplantation for the treatment of recurrent Clostridium difficile infection. The aim of this study is to evaluate the cost-effectiveness of fecal microbiota transplantation compared with vancomycin for the treatment of Clostridium difficile infection in Australia. **METHODS:** A Markov model was developed to compare the cost-effectiveness of fecal microbiota transplantation compared with standard antibiotic therapy. A literature review of clinical evidence informed the structure of the model and the choice of parameter values. Clinical effectiveness was measured in terms of quality adjusted life years. Uncertainty in the model was explored using probabilistic sensitivity analysis. **RESULTS:** Using fecal microbiota transplantation rather than vancomycin saves AU\$7,425 (95% CI: AU\$2,252, AU\$12,598) per Clostridium difficile infection patient. Fecal microbiota transplantation also leads to an incremental increase of 1.02 (95% CI 0.23, 1.81) life-years or 0.87 (95% CI 0.06, 1.68) quality adjusted life years per patient compared with vancomycin. **CONCLUSIONS:** Based on current evidence, fecal microbiota transplantation is cost saving compared with standard antibiotic therapy for the treatment of recurrent Clostridium difficile infection. More research into the long-term safety and quality of life outcomes for patients receiving fecal microbiota transplantation is warranted.

PGI35

EVALUATION OF THE COST EFFECTIVENESS OF RIFAXIMIN-Á IN THE REDUCTION OF RECURRENCE OF OVERT HEPATIC ENCEPHALOPATHY IN BELGIUM

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OBJECTIVES: Hepatic encephalopathy (HE) is associated with high morbidity and mortality. Rifaximin-α is effective in reducing the recurrence of episodes of overt HE, and reduces hospital utilisation. The objective was to characterise the cost effectiveness of rifaximin-α plus a standard of care (SOC) versus SOC alone (lactulose) in patients with liver cirrhosis in Belgium. **METHODS:** This economic evaluation used a Markov state transition model. The outcome metric was the incremental cost effectiveness ratio (ICER), derived from estimates of the cost/quality adjusted life years (QALYs). The payer perspective was that of the Belgian healthcare system. Outcome data were from two trials of rifaximin-α. Belgian costs data (2010) were derived from published sources. Health-related utility was estimated indirectly from disease-specific quality of life RCT data. The time horizon was five years. Costs and benefits were discounted at 3% and 1.5%, respectively. Real world data were also applied into the model for length of hospital stay (LOHS) and number of admissions. **RESULTS:** Average costs of the included elements of care were €31,262 in the rifaximin-α + SOC arm and €44,190 in the SOC arm, a difference of €12,927. The corresponding values for benefit were 2.5 and 1.9 QALYs per person, respectively, a difference of 0.6 QALYs over the five year period. This translated into a dominant base-case ICER at five years, ten years and for a lifetime simulation, meaning that compared to SOC, rifaximin-α + SOC improves quality of life and offers savings to the Belgian healthcare system. Key parameters impacting the ICER included LOHS and number of hospital admissions. **CONCLUSIONS:** By reducing overt HE episodes, the likelihood of hospital admission and LOHS, rifaximin-α 550 mg + SOC in patients with recurrent HE in the context of liver cirrhosis, represented good value and was cost-saving compared with SOC.

PGI36

ECONOMIC EVALUATION OF INFLIXIMAB FOR TREATMENT OF REFRACTORY ULCERATIVE COLITIS IN IRAN: COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: The aim of this study was assessing cost-utility of infliximab compared with current treatments in patients with moderate to severe ulcerative colitis (UC) in Iran. **METHODS:** We constructed a decision tree model with 5 year time horizon to follow up 1000 hypothetical patients for estimating treatment costs and outcomes. Patients were individuals with moderate to severe UC that is resistant to current treatments. Remission rate, clinical response and surgery were selected as clinical outcomes. Then for estimating QALY, utility value related to each state drive form published literature. We also estimated associated probabilities using patients 'medical records and specialists' opinion. Costs of treatment including physician visits, laboratory tests, hospitalizations, surgery and drugs were estimated based on the public and private sector tariffs and drug price list that set by pricing committee of food and drug administration. Infliximab costs at dosage of 5 mg/kg were calculated for UC patients with average weight of 75 kilogram. **RESULTS:** Incremental cost-utility ratio of infliximab treatment in UC patients estimated with public and private sector tariffs were 18 260 and 188 366 dollars per QALY gained compared with current treatments, respectively. **CONCLUSIONS:** According to recommendation of world health organization for choosing cost effective intervention, interventions with relative cost effectiveness value less than 3 time of gross domestic production per capita are cost-effective. So for UC patients, our finding indicates that ICUR values with public and private sector tariffs are more than 3 time of local GDP per capita, 3.8 and 39.5 respectively and infliximab treatment is not cost effective.

PGI37

COST-UTILITY ANALYSIS OF PROLONGED-RELEASE TACROLIMUS RELATIVE TO IMMEDIATE-RELEASE TACROLIMUS AND CICLOSPORIN IN LIVER TRANSPLANT RECIPIENTS IN THE UK

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OBJECTIVES: Calcineurin inhibitors represent the cornerstone of immunosuppressive therapy after liver transplantation. A recent Bayesian network meta-analysis